

AMENDMENTS

Please amend the application as follows:

In the Claims:

Please cancel claims 3, 16-26, 41-60, 62-64, and 94-99 without prejudice or disclaimer thereto.

In accordance with 37 C.F.R. § 1.121, please substitute for pending claims the following rewritten versions of the same claims, as amended.

C1 *sub D1*
1. (Amended) An isolated nucleic acid molecule encoding a splice variant of vertebrate telomerase.

C2
4. (Amended) The nucleic acid molecule of claim 1, wherein the nucleic acid molecule encodes one of the amino acid sequence presented in Figure 11 (SEQ ID Nos: 35, 37, 39, 42, 44, 46, 48, 50, 52-54, 56-58, 60-62, 64-66, 68-70, 72-74, 76-78, 80-82, 84-86), or variant thereof, wherein said variant has at least 75% amino acid identity with said amino acid sequences presented in Figure 11.

5. (Amended) An isolated nucleic acid molecule encoding any of the amino acid sequences presented in Figure 11 (SEQ ID Nos: 35, 37, 39, 42, 44, 46, 48, 50, 52-54, 56-58, 60-62, 64-66, 68-70, 72-74, 76-78, 80-82, 84-86), or which hybridizes under the following stringency conditions: 1 M Na⁺; 5X SSPE, 0.5% SDS, 5X Denhardt's solution at 65°C to the complement of one of the sequences thereof.

6. (Amended) An isolated nucleic acid molecule comprising any of the sequences presented in Figure 10 (SEQ ID Nos.: 18, 23, 25, 27, 29, 30, 32, 33), or which hybridizes under the following stringency conditions: 1 M Na⁺; 5X SSPE, 0.5% SDS, 5X Denhardt's solution at 65°C to the complement of one of the sequences thereof.

C3
11. (Amended) An expression vector, comprising a heterologous

C3
CONT.

promoter operably linked to a nucleic acid molecule according to any of claims 1, 2, and 4-6.

C4

13. (Amended) A host cell containing a vector according to claim 11.

Part D2
C5

27. (Amended) A nucleic acid probe that is capable of specifically hybridizing to a nucleic acid molecule encoding a vertebrate telomerase under the following stringency conditions: 1 M Na⁺ at 65°C; 5X SSPE, 0.5% SDS, 5X Denhardt's solution at 65°C.

C6

31. (Amended) The probe of claim 27, wherein the nucleic acid molecule is labeled.

Part D4
C7

34. (Amended) The primers of claim 32, wherein the nucleic acid molecule comprises any of the sequences presented in Figure 11 (SEQ ID Nos: 35, 37, 39, 42, 44, 46, 48, 50, 52-54, 56-58, 60-62, 64-66, 68-70, 72-74, 76-78, 80-82, 84-86) or the complements thereof.

C8
Part D5

61. (Amended) An isolated nucleic acid molecule comprising the sequence selected from the set consisting of sequences selected from region 1 (SEQ ID No:23), region α (SEQ ID No:25), region β (SEQ ID No:27), region 2 (SEQ ID No:29) or region 3 (SEQ ID No:30) as presented in Figure 10 and variants thereof.

C9
Part D6

65. (Amended) An isolated nucleic acid molecule encoding a splice variant of a reference human telomerase, wherein the reference human telomerase has SEQ ID No.1).

C10
Part D7

71. (Amended) The nucleic acid molecule of claim 65, wherein the nucleic acid molecule comprises one of the sequences presented in Figure 11 (SEQ ID Nos: 34, 36, 38, 41, 43, 45, 47, 49, 51, 55, 63, 67, 71, 75, 79, 83), a complement thereof, or a sequence that hybridizes under the following stringency conditions: 1 M Na⁺; 5X SSPE,

0.5% SDS, 5X Denhardt's solution at 65°C to the sequence or its complement.

C10
cont.

72. (Amended) The nucleic acid molecule of claim 65, wherein the nucleic acid molecule encodes one of the amino acid sequences presented in Figure 11 (SEQ ID Nos: 35, 37, 39, 42, 44, 46, 48, 50, 52-54, 56-58, 60-62, 64-66, 68-70, 72-74, 76-78, 80-82, 84-86), or variant thereof, wherein said variant has at least 75% amino acid identity with said amino acid sequences presented in Figure 11.

ADD C11

101. (Amended) An isolated nucleic acid molecule encoding a human telomerase that lacks RTase motif A.

In the Drawings:

Under 37 C.F.R. 1.121, attached is a red-lined copy of Figs. 7A, 7B and 10A showing proposed changes to Fig. 7A and Fig. 10A. Upon approval by the Examiner of such changes, Applicants will submit new drawings in compliance with 37 C.F.R. 1.84.